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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/777,666	02/10/2004	F. Michael Hosking	SD7455/S102182	5867	
20567	7590 01/10/2006		EXAMINER		
SANDIA CO	ORPORATION		TRAN	, LEN	
P O BOX 580 MS-0161	00		ART UNIT	PAPER NUMBER	
	ALBUQUERQUE, NM 87185-0161			1725	
			DATE MAIL ED. 01/10/200		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/777,666	HOSKING ET AL.				
		Examiner	Art Unit				
		Len Tran	1725				
Period fo	The MAILING DATE of this communication app	<u> </u>	correspondence address				
	ORTENED STATUTORY PERIOD FOR REPLY	( IS SET TO EXPIRE 3 MONTH	(S) OR THIRTY (30) DAYS				
WHIC - Exte after - If NC - Failu Any	CHEVER IS LONGER, FROM THE MAILING DA nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory period we re to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  36(a). In no event, however, may a reply be ting  will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on <u>08 November 2005</u> .						
2a)⊠	This action is <b>FINAL</b> . 2b) This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dienoeit	·	n parto Quayio, 1000 O.B. 11, 4	55 S.S. 216.				
Disposition of Claims							
-	<ul><li>☐ Claim(s) 1-14 is/are pending in the application.</li><li>4a) Of the above claim(s) is/are withdrawn from consideration.</li></ul>						
	☐ Claim(s) 14 is/are allowed.						
·	⊠ Claim(s) <u>1-8,11-13</u> is/are rejected.						
	⊠ Claim(s) <u>9 and 10</u> is/are objected to.						
8)□	Claim(s) are subject to restriction and/or	r election requirement.					
Applicati	on Papers						
9)[	The specification is objected to by the Examine	r.					
10)	The drawing(s) filed on is/are: a)☐ acce	epted or b) objected to by the	Examiner.				
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority (	ınder 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:							
	<ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>						
	Copies of the certified copies of the priority documents have been received in this National Stage						
	application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachmen	t(s)						
	e of References Cited (PTO-892)	4) Interview Summary Paper No(s)/Mail D					
3) Inform	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date		Patent Application (PTO-152)				
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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 3. Claims 1-8 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heitman et al (US 5,102,031).

Heitman et al disclose a method for brazing by applying alternating current across a workpiece to resistively heat a pre-placed filler metal to a temperature sufficient to melt the filler metal, wherein the material for the workpiece is nickel alloy and the filler is copper (col. 2, line 51 – col. 3, line 52) (col. 7, lines 5-19).

Heitman et al fail to teach a discontinuity on the workpiece and wherein current applied is less than 5000 amps and less than 5 volts.

However, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to braze on a workpiece with a discontinuity, since braze is either used in repairing the workpiece or joining workpieces. In addition, the current and voltage being less than 5000 amps and 5 volts, respectively, would have been obvious, since a sufficient current and voltage are needed to melt the filler material.

## Allowable Subject Matter

4. Claims 9-10 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior arts of record fail to teach residence time between 3 and 10 seconds.

#### Response to Arguments

5. Applicant's arguments filed 11/8/05 have been fully considered but they are not persuasive.

Applicant's argument have been considered, however, based on broadest interpretation the claims are not distinct from Heitman et al. Heitman et al disclose a method for brazing. AC is applied across the workpiece, wherein the workpiece has a discontinuity. The filler is being melted and drawn into the discontinuity. Applicant argues that the filler is placed near the

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discontinuity as claimed, but not on the surface of discontinuity. However, based on broadest interpretation, the brazed filler is being placed near the discontinuity by the holder 16 and then distributed on the surface of the discontinuity by melting. Therefore, the claims are not distinct from Heitman et al.

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6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Len Tran whose telephone number is (571) 272-1184. The examiner can normally be reached on M-F, 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Len Tran
Primary Examine
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January 7, 2006